

A Year In Review

The Concession Environmental Audit Program (CEAP) is gaining momentum. In 1999, we completed one pilot audit. In FY2000, we were up to four. In FY2001, 21 audits were completed. Currently, six audits are nearing completion, and another 75 to 100 CEAP audits are planned for FY2002. For those of you who have not heard of the CEAP, these audits are part of an independent, national audit program established in 1999 for NPS concession operations to proactively identify environmental compliance issues and develop solutions to improve environmental management and stewardship.

The Audit Process—An Overview

CEAP audits involve a site visit where auditors inspect a concessioner's facilities and services, conduct concessioner employee interviews, and review concessioner environmental documentation such as records and reports. Auditors review what they observe against NPS Audit Criteria that are based on Federal, state, and local regulations; DOI and NPS policies; and industry and government-accepted Best Management Practices (BMPs). These Audit Criteria are grouped into 21 categories, such as Hazard Communication, Green Procurement, and Emergency Planning and Reporting.

Auditors use the site visit as an opportunity to discuss and recommend facility- and



Going for the summit with the audit program.

service-specific strategies that the concessioner might want to adopt to improve environmental management and performance. After the site visit, concessioners receive a formal report identifying "Audit Findings" where action is necessary to comply with Audit Criteria. Each Audit Finding is given a priority ranking and a due date by which it should be addressed, which helps the Park and concessioner manage all Audit Findings and ensure compliance.

An Emphasis on Assistance

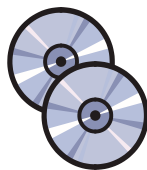
The audit program has and will continue to emphasize assisting concessioners in achieving and maintaining regulatory compliance and implementing BMPs. As one concessioner remarked after an Audit Team site visit, "[y]ou weren't green and you didn't have horns . . ." In fact, the concessioner appreciated the opportunity to learn more about environmental and human health issues

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Compliance Assistance Goes Platinum

The Concession Environmental Management Program is developing a CD-ROM to help concessioners understand and develop environmental programs. The CD-ROM will include:

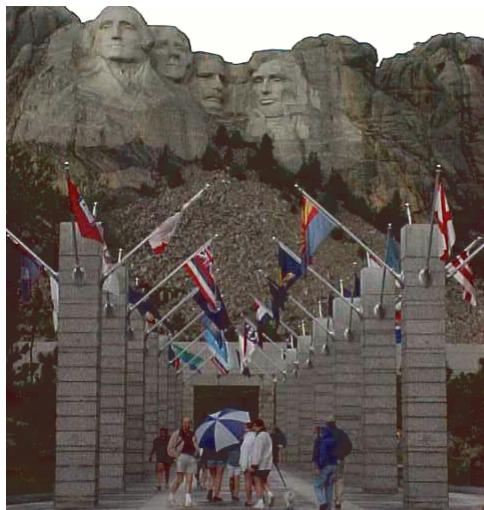
- ✓ Environmental audit guidance.
- ✓ Best Management Practice resource lists.
- ✓ Tools and resources that help concessioners comply with Federal rules and regulations.
- ✓ Past copies of *GreenLine*.



If you want to see other information on the CD-ROM, or would like to receive a copy when available, call the *GreenLine* Technical Assistance and Clearinghouse Line at 303/987-6913.

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GreenLine

NPS Concession Program, Publisher
NPS Concession Program, Editor
PRIZIM Inc., Production
PRIZIM Inc.,
Layout & Design

GreenLine is an official publication of the National Park Service (NPS) Concession Program for NPS concessioners. The newsletter provides a forum in which the NPS can share information with concessioners about the Concession Environmental Management Program, current environmental requirements, and Best Management Practices; it also identifies resources available to improve concessioner environmental performance and highlights success stories.

Guest articles have been reviewed by the NPS Concession Environmental Management Program and, if required, edited in collaboration with the original author.

GreenLine is published twice a year by the NPS Concession Program Center
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Subscriptions: *GreenLine* is a free publication from the NPS Concession Program. If you are not a NPS concessioner and would like to subscribe to *GreenLine*, send your contact information to the NPS Concession Program Center.

Notice: This newsletter is intended as an educational tool for concession operators in national parks. Every effort has been made to ensure the information presented is accurate, however the content does not constitute a complete reference to State, Federal, or local laws nor does it constitute National Park Service rulemaking, policy, or guidance. Relying solely on the information in the newsletter will not guarantee compliance with applicable regulations. Strategies, procedures, and proposed solutions for compliance issues should be discussed with the appropriate State, Federal, and/or local regulatory agencies; it remains the sole responsibility of operators to determine compliance with regulations. Inclusion in the newsletter is not an endorsement of a particular operator, product, or strategy.

GreenLine is printed on 100% recycled/recyclable acid-free paper (30% post-consumer) and is printed using soy inks.



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related to concessioner facilities and services.

Audit Findings for FY2001

Twenty-one concessioner audits were completed across the nation in FY2001. These concessioners included food, lodging, retail, horse and mule, transportation, and marina services. The results of these audits are summarized in Table 1.

The CEAP audits conducted thus far provide useful information about trends that are common to many concessioners, regardless of size or type of service.

Hazard Communication (HAZCOM) Standard Audit Findings were the most prevalent regulatory-based (i.e., Priority 1 or 2) Audit Findings documented during 2001. Concessioners either did not have or were missing elements of a HAZCOM plan. In many cases, concessioners simply were not aware of the regulatory requirement for a documented and implemented HAZCOM plan.

Hazardous waste management came in second in terms of number of regulatory findings.

Audit results indicated that many concessioners were not aware of specific hazardous waste management requirements for their state or locality, lacked sufficient documentation required by regulations, had not determined whether their wastes were "hazardous wastes," or had overlooked that old and forgotten hazardous chemicals must be managed as hazardous waste.

Audit Findings related to Environmental Management Systems (EMS) were the most widespread among all concessioners audited. This was expected since none of the concessioners audited were operating under the new standard Concession Contract that requires that concessioners develop and implement an Environmental Management Program (EMP), which is a type of EMS. An EMS is a way in which to manage all environmental issues related to a concessioner's facilities and services, including HAZCOM, hazardous waste management, and other environmental issues, such as those listed in Table 2. As such, all EMS Audit Findings were ranked as Priority 3s since they were not yet a

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Table 1: FY2001 Audit Finding Descriptions and Numbers

Audit Priority	Description	No. of Total Findings
1	Immediate harm to human health or the environment.	34
2	Regulatory Audit Findings that are not Priority 1.	236
3a	Non-regulatory Audit Findings. Can be reasonably achieved in short-term with little effort and/or cost.	165
3b	Non-regulatory Audit Findings. May require significant time and/or capital costs to implement.	30
TOTAL		465

CONGRATULATIONS!

Amfac Parks & Resorts received a U.S. Department of the Interior (DOI) 2001 Environmental Achievement Award. Amfac was one of only 13 winners to receive this award. Two other concessioners received an honorable mention: Evelyn Hill Inc. and ARAMARK Parks & Resorts.

The Environmental Achievement Award recognizes DOI bureaus, offices, employees, contractors, and concessioners for their exceptional achievements or contributions in a range of environmental discipline areas, including: pollution

prevention, recycling, sustainable design, environmentally preferable purchasing, facility environmental excellence, environmental stewardship, auditing and environmental management, and education and outreach.

Award nomination forms for 2002 should be available late spring. If you are interested in obtaining more information about the DOI Environmental Achievement Awards, contact the *GreenLine* Technical Assistance and Clearinghouse Line at 303/987-6913.



contractual requirement. In the future, the CEAP expects that EMS Audit Findings, if any are identified, will become Priority 2 Audit Findings since they will be required in all new Concession Contracts.

Information about other common environmental issues identified during CEAP audits is shown in Table 2.

Next Steps

The trend information that has emerged from the CEAP is being used by the Concession Environmental Management Program to help identify and develop concessioner compliance assistance tools and training programs so that concessioners can become more informed about common environmental issues. Concessioners may want to use the

"common" environmental issues identified in Table 2 to proactively pinpoint and correct environmental issues that may apply to their facilities/services.

If you would like to know more about the CEAP trends observed in 2001, call the *GreenLine* Technical Assistance and Clearinghouse Line at 303/987-6913.

Table 2: FY2001 Top Eight Environmental Issues Identified During CEAP Audits

Environmental Issue	Sample Description of Environmental Issues (Entire descriptions are not necessarily applicable to all concessioners.)	% of Environmental Issues by Priority			
		1	2	3a	3b
Environmental Management Systems (EMS)	No EMS (such as an Environmental Management Program (EMP)), including an environmental policy, program to ensure regulatory compliance, staff training on environmental responsibilities, process to evaluate progress in meeting environmental goals.	-	-	69	31
Hazard Communication (HAZCOM)	No HAZCOM program or no HAZCOM program containing all required elements, including a written HAZCOM plan, list of hazardous materials, container labeling, material safety data sheets, staff training on HAZCOM program.	-	92	8	-
Hazardous Waste Management	Not aware of local- or state-specific hazardous waste management requirements, no hazardous waste determinations conducted, no documentation on hazardous waste management, and accumulation of "abandoned" hazardous materials that are hazardous wastes.	2	67	31	-
Miscellaneous Maintenance Wastes	Improper management of universal wastes, such as burned out fluorescent light tubes, dead batteries, waste pesticides, or waste mercury-containing thermostats, including improper storage conditions, labeling, storage times (i.e., over one year).	2	63	35	-
Solid Waste Management	No Integrated Solid Waste Alternatives Program (ISWAP) explored, lack of an effective recycling program, and improper trash container management issues.	-	44	56	-
Green Procurement	No research conducted into waste or pollution prevention practices; no program or policies addressing environmentally-preferable purchasing.	-	-	79	21
Hazardous Material Storage	Incompatible hazardous materials stored together, improper storage containers, no flammable material storage cabinets available for flammable materials, and unsecured compressed gas cylinders.	-	56	44	-
Respiratory Protection	No written Respiratory Protection Program, no workplace hazard assessments, no respirator fit tests, no medical monitoring of employees wearing respirators, and no documented records.	8	92	-	-

Regulations Have You Stumped?

The U.S. Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) have regulatory assistance "hotlines" that are available to concessioners. Callers may choose to remain anonymous during their phone calls.

For information about EPA regulations, such as hazardous waste, underground storage tanks, and the Emergency Planning and Community Right-to-Know Act (EPCRA), call the RCRA, Superfund and EPCRA Call Center at:

1-800-424-9346 (M-F, 9am-5pm EST)

Other EPA hotlines are available on topics such as drinking water, pesticides, endangered species, and lead. For a complete listing, access the EPA hotline website at www.epa.gov/epahome/hotline.htm.

For information about OSHA regulations, such as the Hazard Communication Standard or the Respiratory Protection Program, call the OSHA HelpLine directly at:

301/515-6796 (M-F, 9am-4pm EST)

Concessioners may also call the OSHA Referral Service at 1-800-321-OSHA (6742); press 1 for English, press 5 to request information about OSHA, enter your zip code, and you will be connected to a state OSHA representative who can then transfer you to the OSHA HelpLine.



Trek on Trex

Article by Kirk Huserik, Guest Services, Inc.

The store's wooden deck is warping, splintering, and discolored. The park hints that the deck needs to be repaired according to maintenance plan standards, and warns that it is a potential tripping hazard. And what is frustrating is that it was just replaced a few years ago.

Sound familiar? There must be another way . . .

Take it from Guest Services, Inc., which operates the Columbia Island Marina in George Washington Memorial Parkway in Washington, D.C.. Guest Services used environmentally-preferable Trex® decking to replace seven of its older docks; the new design resulted in 246 new boat slips. Containing no toxic chemicals or preservatives, Trex is a composite lumber



Columbia Island Marina's Trex dock.

that is made primarily from recycled plastic grocery bags, reclaimed pallet wrap, and waste wood. "Composite lumber" does not describe one specific product, but rather a broad range of materials of various qualities and characteristics; in general, it is made from recycled plastics and wood, although the amount of recycled content may vary widely.

For the marina, this decking alternative made sense on all fronts. Trex can be cut, drilled, routed, sanded, and fastened as well as traditional lumber, but it is splinter-free. It offers excellent traction in wet and dry conditions. In addition, it is a low-maintenance material that does not require protective sealants or stains; contains an ultraviolet (UV) inhibitor to minimize fading; and has a 10-year warranty. One restriction in using Trex is that it should not

be used for primary structural load-bearing elements, such as posts, joists, and beams.

Trex and other composite lumbers are comparably priced to most premium decking lumber. Using composite lumbers to replace or build docks, decks, benches, or other structures can actually save money over using "less expensive" lumber, once costs for stains, sealants, paints, replacement boards, and labor are calculated for the life of the product.

Columbia Island Marina is not the only one that has decided that composite lumber is the way to go; it has been used successfully by parks and businesses from Alaska to Florida in marine, freshwater, and dry land environments. Given composite lumber's durability, quality, cost, and availability, it just makes sense to trek on over to a building supplier to purchase and use composite lumber in your next project.

For more information on Trex, and to locate a supplier, visit www.trex.com.

Concession

Something "Fishy" In Concession Food Services

Article by Chris Lane, Director of Environmental Programs, Amfac Parks & Resorts.

Imagine dining on a fresh swordfish steak while gazing at the panoramic splendor of the Grand Canyon.

But you won't find this "catch of the day" on menus at concessions operated by Amfac Parks & Resorts. Last year, Amfac adopted and implemented a program to support sustainable fishing by choosing not to serve specific fish species and recommending other more "sustainable" fish in its restaurants, including those at Grand Canyon, Yellowstone, and Everglades National Parks.

Guided by the Monterey Bay Aquarium Seafood Watch program and the Audubon

Society's Living Oceans Seafood Guide, Amfac categorized seafood choices into fish it will not serve and fish it recommends to guests. Chilean sea bass, Atlantic swordfish, shark, and bluefin tuna are some of the fish that are not being served because the survival of those species is threatened by too much fishing or the fish are caught or farmed in ways that damage the environment. The "no-serve" policy will remain in place until the survival of these species is no longer threatened or until environmental impacts associated with certain existing fishing methods are minimized.

To make it onto Amfac's menu, fish must meet three criteria: the fish must be a part of a wild population that is abundant

enough to sustain fishing; there are low levels of wasted catch; and the fish are caught or farmed in ways that minimize environmental impacts. This "fish policy" is posted in restaurant waiting areas and kitchens company-wide to educate guests and employees on how they can help protect global fisheries.



An appetizing meal of sustainable fish.

The program is augmented by two other Amfac initiatives that support the concept of sustainable foods, including serving shade-grown, fair-trade organic coffee and Conservation Beef (a 100% grass-fed free-range beef product

made from Montana cattle raised without added hormones or antibiotics) in several of its national park restaurants and cafeterias.

Of course, application of green procurement in food services goes far beyond

Common Sense Risk Management

Article by Bonnie Campbell, Cades Cove Riding Stables.

When Great Smoky Mountains National Park's Concession Specialist and Safety Officer asked concessioners to meet new risk management requirements, Cades Cove Riding Stables decided to use a little "horse-sense" in developing a Risk Management Program (RMP) for their small stable operation. The result was a piece of quality craftsmanship typical of the area.

Cades Cove Riding Stables' new and improved RMP centers around a series of fact sheets

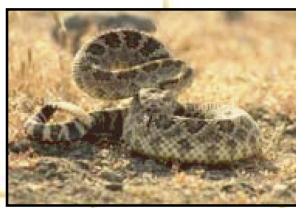
describing common hazards found on the trail and in the stables. Color photos vividly illustrate



Field mouse.

hazards that employees may expect to encounter while working in the stables, such as

mice that may carry Hantavirus, deer ticks that may carry Lyme disease, poisonous brown recluse spiders, and venomous copperhead snakes. The photos keep staff interested as they read through the document. Standard operating procedures (SOPs) and sample emergency postings included in the plan cover a variety of activities, (even microwave cooking!), and are straightforward, practical, and easy to understand.



Rattlesnake.

Keep in mind that an uncomplicated program is not an unsophisticated one. Cades Cove Riding Stables' documented RMP includes elements that are not often seen in a small concessioner's RMP. But these elements will help Cades Cove Riding Stables' RMP be informative,

dynamic and sustainable. The elements include:

- A well-crafted safety policy;
- A clear designation of responsibilities;
- Annual goals and objectives for improvement;
- Monthly safety meetings that encourage staff involvement and feedback; and
- Monitoring mechanisms that include safety inspections as well as resolution and abatement procedures.

A small stable in the Great Smoky Mountains has proven it is possible to develop an effective program with minimal resources. With a little "horse-sense," all concessioners can develop an effective and appropriate RMP.

Cades Cove Riding Stables has volunteered to share its experience and knowledge about developing an RMP with others; email Bonnie Campbell at willis@icx.net with questions.

Highlights

what is served at the dinner table. Among other things, it includes using recycled content or biodegradable containers; using unbleached recycled content napkins, towels, tissue, and toilet paper; using environmentally preferable cleaning products; using bulk dispensers for amenities like ketchup; serving water on request in more arid environments; purchasing organic and locally-grown food products; and reducing solid waste by purchasing products with minimal packaging. In addition to the "fish policy," Amfac has also developed a written green procurement policy requiring vendors to adhere to Amfac's environmental policy by minimizing packaging and encouraging recycling.

For more information about sustainable fisheries, contact either the Monterey Bay Aquarium at www.mbayaq.org or the Seafood Choices Alliance at www.seafoodchoices.com.

We Want To Hear From You!

The Concession Environmental Management Program is looking for stories to include in *GreenLine*. If you want to be included in Concession Highlights and be recognized for your innovative or exemplary environmental programs or ideas or want to write an article for

GreenLine, please call the *GreenLine* Technical Assistance and Clearinghouse Line at 303/987-6913. We would love to hear from you!

Past Concession Highlights have included:



Evelyn Hill Inc.



Blue and Gold Fleet, LC.

To Cleanup or Not to Cleanup - That is the Question

Hazardous Substance Spills and the Emergency Action Plan

Five gallons of fuel are spilled, and it is flowing toward the storm drain. What do concessioner employees do?

Do they:

- a) Make sure no fuel goes down the storm drain, but do not clean it up.
- b) Clean the spill up.
- c) Call their supervisor.
- d) Make sure no one is looking, kick some dirt on it, and walk away?

The right answer actually depends on the concessioner's policy for how its employees should respond in this situation. But "d" is certainly not the correct answer in any situation!

The first step in developing a hazardous substance spill policy is to consult with the Park to determine whether it expects a concessioner to clean up nonincidental hazardous substance spills. Different Parks have various hazardous spill response policies for concessioners since Park staff have varying levels of spill response capabilities. Whatever the decision, concessioners should make sure that they document the Park's decision on how they should respond to nonincidental hazardous substance spills and releases, and share a copy of its specific nonincidental hazardous substance spill policies and procedures with the Park.

If the agreed-upon policy is that concessioner staff are NOT allowed to clean up hazardous substance spills and leaks, then procedures should be documented in an **Emergency Action Plan (EAP)**. The concessioner may already have this plan as part of its Risk Management Program; however, it may not specifically address hazardous substance spills and

leaks. To address this issue, the concessioner's EAP should include, but is not limited to, the following:

- Training employees where to go and what to do in the event of an emergency, including what to do in case of a hazardous substance spill,
- Designating people who can provide first aid,
- Accounting for employees during an emergency,
- Outlining ways to report emergencies, and
- Providing a list of people who know the details about the **EAP**.

If there are more than 10 employees working at concessioner facilities, the **EAP** must be documented in writing. Otherwise, a written **EAP** is suggested as a Best Management Practice. Whatever the case may be, all employees must be trained in the **EAP**.

If the agreed-upon policy is that concessioner staff is **REQUIRED** to clean up hazardous substance spills and leaks, then procedures must be documented in an

Emergency Response Plan (ERP). **ERPs** are often more complex than **EAPs** since concessioners must have spill response equipment, have specialized spill cleanup training, and fulfill numerous other rigorous regulatory requirements. Information about **ERPs** will be included in a future issue of *GreenLine*.

So what about our question at the beginning of this article? If a concessioner and the Park have decided that concessioner



employees should NOT stop spills and clean up spills, the correct answer would be "c."

Nonincidental Spill

A spill that poses a significant safety or health hazard to those cleaning up the spill and depends upon an individual's familiarity with the substance, the amount spilled, and where the spill occurred. In general, nonincidental spills are those that **UNEXPECTEDLY** occur during normal operations and are usually **MORE** than a few ounces. (OSHA guidance)

For more information or written guidance about the **EAP** or **ERP**, contact the OSHA HelpLine at 301/515-6796 or the Concession

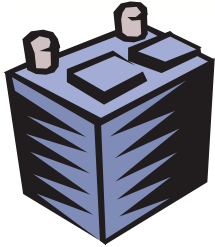
Environmental Management Program *GreenLine* Technical Assistance and Clearinghouse Line at 303/987-6913.

Upcoming Events

EnvironDesign6 Conference, April 3-5, 2002 in Seattle, WA. EnvironDesign6 is a conference where professionals in a variety of business sectors will gather to explore practical solutions to sustainability, and will network with a number of environmental leaders to discuss strategies to advance and improve a business' environmental performance. For more information, go to www.isdesignet.com.

Facility Management Conference, April 14-19, 2002 in San Diego, CA. Sponsored by the U.S. Department of the Interior's Planning, Design Construction, and Maintenance Counsel Members, this conference will provide a forum for participants to meet and exchange information on facility management issues/topics and training related to facilities and infrastructure operation, maintenance, management, condition assessments, database management, repair, renovation, and rehabilitation. For more information, go to www.doi.gov/conference/facilities or contact Erin Quinn at 303/445-2709.

Power Up for Battery Recycling



Each year, more than two billion used batteries are tossed into the regular trash. These batteries contain heavy metals, acids, and other contaminants

that can be harmful to the environment. But these dead batteries could be used to make new batteries and other products if businesses and consumers recycled them.

The following table presents some of the current options for battery disposal. This

information identifies federal requirements and is not all-inclusive; a state, region, or city may have more stringent rules and regulations for managing dead batteries. Contact your state environmental regulatory agency (see www.meritgroup.org/stateregagen.htm) for more information.

	Dead Unsealed Lead Acid Batteries	Dead Ni-Cad and Small Sealed Lead Acid (SSLA) Rechargeable Batteries	Dead Alkaline Batteries
Applicable Regulations	40 CFR 266 excludes unsealed lead-acid batteries from hazardous waste management requirements provided they are recycled. ¹	40 CFR 273, the Universal Waste Rule, provides less stringent management requirements for these batteries that would otherwise have to be managed as hazardous waste. ¹	There are currently no federal management requirements for these batteries.
Where Are They Found?	Cars, trucks, boats, electrical generators, etc.	Hand-held radios, cellular phones, etc.	Common household products, such as flashlights, radios, and some cameras.
Storage	<ul style="list-style-type: none"> Recommend storing in spill- and leak-proof container (e.g., plastic bin). Recommend protecting from weather (e.g., store indoors). 	<ul style="list-style-type: none"> Store in spill- and leak-proof container (e.g., plastic bin). Protect from weather (e.g., store indoors). Do not store more than 11,025 lbs of universal wastes onsite at any one time.² 	<ul style="list-style-type: none"> Recommend storing in spill- and leak-proof container (e.g., plastic bin). Recommend protecting from weather (e.g., store indoors).
Labeling	<ul style="list-style-type: none"> Recommend labeling storage container with the words "Used Lead Acid Batteries to Be Reclaimed." Recommend labeling storage container with the date on which the first battery was placed in the container; this way, one will know the maximum length of time that the batteries are stored onsite. 	<ul style="list-style-type: none"> Storage containers must be labeled with the words "Universal Waste—Used Batteries." Recommend labeling storage container with the date on which the first battery was placed in the container; this way, regulators will know the maximum length of time that the batteries are stored onsite. 	<ul style="list-style-type: none"> Recommend labeling storage container with the words "Used Alkaline Batteries." Recommend labeling storage container with the date on which the first battery was placed in the container; this way, one will know the maximum length of time that the batteries are stored onsite.
Accumulation Time Limits	Recommend that batteries be recycled within one year.	Must recycle within one year.	Recommend that batteries be recycled within one year.
Recycling/ Disposal	Recycle. Recycling options may include: <ul style="list-style-type: none"> Returning to place of purchase. Sending to an authorized battery recycling company. Giving to a local household hazardous waste program that accepts waste from businesses and recycles lead acid batteries. 	Recycle. Recycling options include: <ul style="list-style-type: none"> Calling 1-800-BATTERY or going to www.rbrc.org to learn how and where to recycle rechargeable batteries. Giving to a local household hazardous waste program that accepts waste from businesses and recycles Ni-Cads and SSLAs. 	Recommend recycling, if possible. Recycling options include contacting Inmetco at 724/758-2800 or www.inmetco.com about its battery recycling mail-in program. If less than two dead batteries and no recycling facilities exist, toss in regular trash.
Record-keeping	Recommend keeping records on: <ul style="list-style-type: none"> Number of dead batteries generated. Recycling facility's name. Date batteries are recycled.³ 	Recommend keeping records on: <ul style="list-style-type: none"> Number of dead batteries generated. Recycling facility's name. Date batteries are recycled.³ 	Recommend keeping records on: <ul style="list-style-type: none"> Number of dead batteries generated. Recycling facility's name. Date batteries are recycled.³
Other	If not recycled, must either be managed as a universal waste ² or hazardous waste, which entails following more stringent regulations.	If not recycled, must be managed as a hazardous waste, which entails following more stringent regulations.	Not regulated at the federal level. If manufactured before 1992, may be considered a hazardous waste because of mercury or other toxic chemicals.

- These hazardous waste management regulatory requirements do not apply to Conditionally Exempt Small Quantity Generators (CESQGs). However, CESQGs are strongly encouraged to follow these requirements as a Best Management Practice.
- Universal wastes include dead batteries, burned out fluorescent light tubes, waste pesticides, and mercury-containing thermostats. The storage threshold can be exceeded, but then additional requirements apply. Refer to *GreenLine* Volume I, Number II for more information on universal waste.
- As a Best Management Practice, request a receipt from the recycling facility and keep it on file to verify that batteries were recycled.

Breathe Easy

With A Respiratory Protection Program

Do employees wear dust masks when cutting grass or use one of those gas-mask-like respirators when painting, sanding, or spraying pesticides? Seems like a good idea, right? If employees use respirators because employers told them to, or if they do so voluntarily, there are federal regulations that need to be followed. The Occupational Safety and Health Administration (OSHA) has a number of requirements to make sure individuals are physically capable of wearing, properly trained to wear, and correctly handle respirators.

The First Step. Before handing out respirators, evaluate what, if any, respiratory hazards exist, and determine whether hazards can be eliminated by changing work practices, installing fans, or using other engineering controls. Hazard assessments are best conducted by a professional, such as an industrial hygienist.

The RPP. If the only option for getting the work done means wearing a respirator, then employers must designate a program administrator to oversee a Respiratory

Voluntary Wearers

If employees voluntarily wear dust masks, then a written RPP is not needed. However, the employer must provide employees with the information in Appendix B of the OSHA Respiratory Protection Standard.

Employers that allow employees to voluntarily wear other types of respirators must distribute Appendix B and must have a written RPP. However, the only sections that must be included are medical evaluations and respirator care and maintenance.



Respirators should not be stored as shown; they should be protected from dust, moisture, and other types of contamination.

Protection Program (RPP). OSHA regulations stipulate that the RPP should be documented in writing, kept on file, implemented, and include the following elements:

1. **Respirator Selection.** An employer must select NIOSH-certified respirators appropriate for employees' anticipated respiratory hazard exposure. For instance, respirator cartridges used will vary depending on whether dusts, fumes, mists, vapors, or gases will be encountered.
2. **Medical Evaluation.** Each employee required to use a respirator must be medically evaluated by a physician or other licensed health care professional prior to wearing a respirator to make sure that wearing a respirator will not harm his/her health.
3. **Fit Testing.** Each employee required to use a respirator must have a qualitative or quantitative fit test prior to using a respirator, and then have an annual fit test.

4. **Respirator Use.** An employer must establish and implement procedures for proper use of respirators in routine and emergency situations.
5. **Respirator Care and Maintenance.** An employer must establish and implement procedures and schedules for cleaning and maintaining respirators.
6. **Breathing Air Quality.** For respirators where air is supplied through a tank (i.e., similar to SCUBA equipment), an employer must make sure the supplied air is high quality.
7. **Training.** An employer must teach employees about potential respiratory hazards in the workplace and proper respirator use and maintenance.
8. **Evaluation of RPP.** An employer must have procedures for regularly evaluating the RPP's effectiveness, and this should occur at least yearly.

The Bottom Line. Understanding respiratory protection hazards and maintaining a compliant RPP can be complicated. If there are respiratory protection hazards in the workplace, the best option may be to contract the work with a company that already has trained staff with RPP experience; this way, a concessioner does not need to develop and maintain an RPP. If a concessioner still decides to develop and maintain an RPP in-house, it is important to have a qualified individual familiar with the OSHA regulations to administer the program.

Respiratory Protection Resources

OSHA Helpline: 301/515-6796

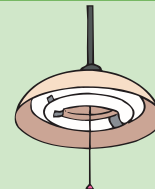
OSHA state office: 1-800-424-9346

Small Entity Compliance Guide for OSHA's Respiratory Protection Standard: www.osha-slc.gov/html/comp-guides.html.

NPS CoEMP *GreenLine* Technical Assistance and Clearinghouse Line: 303/987-6913



Environmental Tidbits



Did you know that by replacing one incandescent light bulb with a compact fluorescent (CF) bulb . . .

- You will have saved \$40 by the time the CF burns out? Even though CFs are more expensive to purchase, they use up less energy over time than an incandescent bulb. *Earth Communications Office*

sive to purchase, they use up less energy over time than an incandescent bulb. *Earth Communications Office*

- You will have prevented 1,000 pounds of carbon dioxide (CO₂)

from going into the atmosphere by the time the CF burns out? CO₂ is a greenhouse gas and causes climate change. *U.S. EPA, How you can prevent pollution prevention in your home, Aug 1998*